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Application Serial No. 09/892,727
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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the
application.

Listing of Claims:

1.   (Currently Amended) A method for analyzing the operation of a media delivery
device, the method comprising ~~the steps of~~:

determining whether a network connection is functional;

determining whether a first diagnostic agent is functional, in response to a determination
that the network connection is functional;

causing the first diagnostic agent to collect diagnostic data associated with the media
delivery device, in response to a determination that the first diagnostic agent is functional;

analyzing the diagnostic data to determine an operational problem associated with the
media delivery device; [[and]]

removing the first diagnostic agent from the media delivery device;

uploading a second diagnostic agent to the media delivery device, in response to a
determination that the first diagnostic agent is not functional; and~~, wherein uploading the second
diagnostic agent deletes the first diagnostic agent, thereby conserving memory resources.~~

removing the second diagnostic agent from the media delivery device.

2.   (Original) The method of Claim 1 further comprising the step of uploading the
first diagnostic agent to the media delivery device over an alternative network connection, in
response to a determination that the network connection is not functional.

3.   (Canceled)

4.   (Original) The method of Claim 1 further comprising the step of remedying the
operational problem.

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5.   (Original) The method of Claim 4 further comprising the step of uploading a second diagnostic agent to the media delivery device, in response to a determination that the network connection is not functional.

6.   (Currently Amended) A diagnostic tool for remotely analyzing and diagnosing the performance of a media distribution device, comprising:

a data adapter operative to maintain a communication link between the media distribution device and a media delivery service provider;

an intelligent diagnostic agent residing in the media distribution device and operative to collect diagnostic data associated with the media distribution device; and

a diagnostic service center operative to communicate with the intelligent diagnostic agent over the communication link to retrieve the diagnostic data and to determine a performance problem associated with the media delivery device;

wherein the diagnostic service center uploads the diagnostic agent to the media distribution device in response to detecting the performance problem; and

wherein the intelligent diagnostic agent removes the intelligent diagnostic agent from the media distribution device upon remedy of the performance problem, thereby conserving memory resources.

7.   (Original) The diagnostic tool of Claim 6, wherein the performance problem is also associated with a second device functionally connected to the media distribution device.

8.   (Original) The diagnostic tool of Claim 6, wherein the media distribution device is a set-top box.

9.   (Original) The diagnostic tool of Claim 6, wherein the intelligent diagnostic agent is a program module residing in a system memory of the media distribution device.

10.   (Original) The diagnostic tool of Claim 9, wherein the intelligent diagnostic agent is executable in the system memory.

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11.   (Canceled)

12.   (Currently Amended)   The diagnostic tool of Claim [[11]] 6, wherein the diagnostic service center can determine whether the diagnostic agent is functional.

13.   (Currently Amended)   The diagnostic tool of Claim [[11]] 6, wherein the diagnostic service center can replace the diagnostic agent with a substitute diagnostic agent, in response to a determination that the diagnostic agent is not functional.

14.   (Original) The diagnostic tool of Claim 6, wherein the communication link is broadband connection.

15.   (Original) The diagnostic tool of Claim 14, wherein the communication link is an asymmetric digital subscriber line.

16.   (Original) The diagnostic tool of Claim 6, wherein the communication link is a satellite connection.

17.   (Original) The diagnostic tool of Claim 6, wherein the diagnostic service center is further operative to remedy the performance problem.

18.   (Original) The diagnostic tool of Claim 17, wherein the diagnostic service center is further operative to remedy the performance problem by uploading a replacement program module to a system memory of the media distribution device.

19.   (Original) The diagnostic tool of Claim 17, wherein the diagnostic service center is further operative to remedy the performance problem by establishing a secondary communication link between the media distribution device and the media delivery service provider.

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20.   (Currently Amended) A self-diagnosing media distribution system, comprising:

a media delivery service provider operative to transmit a media content stream to a media distribution device;

a diagnostic service center for communicating with the media distribution device to retrieve diagnostic data from the media distribution device and to send remedial data to the media distribution device; and

an intelligent diagnostic agent residing in the media distribution device and operative to collect diagnostic data associated with the media distribution device and to transmit the diagnostic data to the diagnostic service center wherein the diagnostic agent is uploaded to the media distribution device in response to detecting a performance a problem;

whereby the performance problem associated with the media distribution device can be remotely remedied; and

wherein the intelligent diagnostic agent removes the intelligent diagnostic agent from the media distribution device ~~upon remedy of the performance problem, therein conserving memory resources~~.

21.   (Currently Amended) A computer program product comprising a computer-readable medium having control logic stored therein for causing a computer to analyze the operation of a media delivery device, the control logic comprising computer-readable program code for causing the computer to:

determine whether a network connection is functional;

<u>upload a first diagnostic agent via the network connection;</u>

determine whether [[a]] <u>the</u> first diagnostic agent is functional, in response to a determination that the network connection is functional;

cause the first diagnostic agent to collect diagnostic data associated with the media delivery device, in response to a determination that the first diagnostic agent is functional;

analyze the diagnostic data to determine an operational problem associated with the media delivery device; and

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upload a second diagnostic agent to the media delivery device, in response to a determination that the first diagnostic agent is not functional; and, ~~wherein uploading the second diagnostic agent replaces the first diagnostic agent, thereby conserving memory resources.~~ remove the first and second diagnostic agent from the media delivery device.

22.   (Previously presented) The computer program product of Claim 21, further comprising computer-readable program code for causing the computer to upload the first diagnostic agent to the media delivery device over an alternative network connection, in response to a determination that the network connection is not functional.

23.   (Canceled)

24.   (Previously presented) The computer program product of Claim 21, further comprising computer-readable program code for causing the computer to remedy the operational problem.

25.   (Currently Amended) An intelligent diagnostic agent residing in a media distribution device within a self-diagnosing media distribution system, the intelligent diagnostic agent operative to:

    collect diagnostic data associated with the media distribution device; and

    transmit the diagnostic data to a diagnostic service center; and

    remove the intelligent diagnostic agent from the media distribution device;

wherein the diagnostic service center is operative to communicate with the intelligent diagnostic agent over a communication link to retrieve the diagnostic data, to determine a performance problem associated with the media distribution ~~delivery~~ device, and to send remedial data to the media distribution device; and

wherein the intelligent diagnostic agent is uploaded to the media distribution ~~delivery~~ device in response to detecting a performance problem;~~and~~

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~~wherein the intelligent diagnostic agent removes the intelligent diagnostic agent from the media distribution device upon remedy of the performance problem, thereby conserving memory resources.~~

26.   (Currently Amended) A method of diagnosing media service delivery troubles to a remote site, the method comprising ~~the steps of~~:

detecting an occurrence of a trouble-shooting condition that indicates at least one trouble-shooting action should be performed;

conveying at least one first diagnostic software agent over at least one interface responsive to at least detecting the occurrence of the trouble-shooting condition, the at least one first diagnostic software agent capable of being executed by at least one device at the remote site; and

deleting the at least one first diagnostic software agent <u>from the at least one device at the remote site.</u> ~~upon performing the at least one trouble-shooting action, thereby conserving memory resources.~~

27.   (Currently Amended) The method of claim 26, <u>prior to deleting the at least one first diagnostic software agent</u> further comprising ~~the step of~~ conveying at least one second diagnostic software agent in response to detecting that the at least one first diagnostic software agent is not operational on the at least one device at the remote site.

28.   (Currently Amended) The method of claim 26, wherein the conveying of the at least one first diagnostic software agent is further responsive to at least detecting that at least one communication path is at least partially inoperable between a central service center and the remote site.

29.   (Previously presented) The method of claim 28, wherein the at least one first diagnostic software agent is conveyed between the central service center and the remote site over at least one second communication path.

30. (Previously presented) The method of claim 29, wherein the at least one second communication path comprises a wireless link.

31. (Previously presented) The method of claim 30, wherein the wireless link comprises satellite communication.

32. (Previously presented) The method of claim 26, wherein code related to the at least one first diagnostic software agent is stored in the at least one device at the remote site for diagnostic testing and is later removed to conserve memory resources of the at least one device.

33. (Previously presented) The method of claim 26, wherein the at least one first diagnostic software agent is interactive with a customer through a presentation device.

34. (Previously presented) The method of claim 1, further comprising the step of entering identification of the media delivery device in a service log.

35. (Previously presented) The method of claim 34, wherein entering the identification of the media delivery device is performed autonomously by the diagnostic agent.

36. (New) The method of claim 1, further comprising:
presenting a user interface over the media presentation device; and
receiving input from a user via the user interface.

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